

Terraform Template Documentation - LAMP Stack

Prerequisites

Before using this Terraform template to deploy a LAMP stack on AWS, make sure you have the following:

AWS Account: You need an active AWS account to deploy resources. **Terraform Installed:** Ensure you have Terraform installed on your local machine.

main

The main.tf file contains the main configuration for your infrastructure. It includes resources like Load Balancer, EC2 Instance, MySQL Database, and networking components. Adjust these configurations based on your needs.

network

In this file, you'll find configurations for the VPC, Internet Gateway, subnets, and routing tables. Modify these settings to align with your network architecture.

if you run in a issue try: terraform apply -lock=false

variables

variables.tf: This file defines variables that you can customize according to your requirements, such as VPC CIDR blocks, subnet configurations, and other parameters.

userdata

This file includes a bash script with will launch with the deployment of the EC2. This will install the software: mySQL, Python, Apache and the SSM manager. Copy this file over on your pc and change directory in the variables.tf

State Management

This Terraform template uses AWS S3 and DynamoDB to manage the state. Ensure proper AWS credentials are configured for state storage.

Script

You can use this script to interact with the sql server to create and receive a object. Copy this file into the EC2 instance and run with the command: pyhton3 script.py

Usage

1. Copy all code files
2. Customization
3. terraform init
4. Review the Execution Plan:
5. terraform plan
6. Apply the Changes:

7. terraform apply

Notes

AWS credentials should be configured on your machine. Exercise caution when making changes using Terraform to avoid unintended modifications.